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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,899	10/02/2003	Joseph Consolini	6601P033	2351

8791 7590 12/12/2006

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EXAMINER

LAMB, BRENDA A

ART UNIT PAPER NUMBER

1734

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/678,899

Applicant(s)

CONSOLINI ET AL.

Examiner

Brenda A. Lamb

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,8 and 28-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5,8,28 and 30-34 is/are allowed.
- 6) ☒ Claim(s) 35-37 is/are rejected.
- 7) ☒ Claim(s) 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 35-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamauchi et al 2002/0112662.

Yamauchi et al disclose a system comprising at least one nozzle as disclosed at paragraph 0032 to dispense a first liquid (a photoresist), a bowl (11) having an interior region and an interior surface; and a wafer platform and spindle (see paragraph 0032) disposed within the interior region of the bowl, wherein the wafer spindle coupled to the wafer platform to spin the wafer platform to propel an excess amount of the first liquid deposited upon a wafer placed upon the wafer platform to the interior surface of the bowl; a first liquid (photoresist) recovery container or cup which includes a separate waste fluid tank as disclosed at paragraph 0036; a first perimeter drain (area 15, 19) formed within the bowl such that the excess amount of the first liquid (a photoresist) is propelled from the wafer proceeds through the perimeter drain to the recovery container, a vertically disposed waste drain (i.e., area 16), and a second perimeter drain (defined by inner walls of second cup 12) is formed about the bowl to recover a second fluid (a diluted photoresist). Yamauchi et al second liquid recovery container or cup (20) separately collects a different type of liquid (diluted photoresist) from that collected by the first liquid recovery container or cup as disclosed at paragraph 0036. Applicant's intended use that the one or more additional perimeter drains enable the system to

Art Unit: 1734

change photoresist types while in production thus reducing down time for photoresist changing operation has been given no patentable weight to the claimed apparatus since the claimed dispensing element, a nozzle, delivers or supplies a single photoresist to the system at a time. With respect to claim 36, Yamauchi et al teaches at paragraph 0033 the chuck and evidently the shaft is adjustable.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al 2002/0112662 in view of Yamasaka 5,997,653.

Yamauchi et al is applied for the reasons noted above but is silent concerning the bowl being adjustable relative to the wafer platform. However, it was known in the art, at the time the invention was made, to provide an adjustable/movable bowl relative to a wafer platform to facilitate cleaning/rinsing of the wafer as evidenced by Yamasaka (col. 5, lines 64 to col. 6, lines 1-10 and col. 7, lines 19-29). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate an adjustable bowl such as taught by Yamasaka in the Yamauchi et al system in order to facilitate cleaning/rinsing of a treated wafer.

Applicant's arguments filed 10/02/2006 have been fully considered but they are not persuasive.

Applicant's argument that Yamauchi et al fails to teach separate recovery of the liquids or photoresist types in the system is found to be to be non-persuasive since Yamauchi et al teaches at paragraph 0036 the first liquid perimeter drain and second perimeter drain separately collect different types of liquids (the second or additional perimeter drain collecting a photoresist which is diluted with rinse water and therefore

Art Unit: 1734

differs from the liquid collected by the first perimeter drain while the substrate is in the coating position).

Claim 38 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-5,8,28 and 30-34 are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

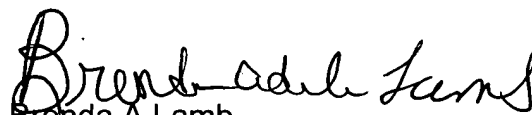
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday. The examiner can also be reached on alternate Wednesdays.

Art Unit: 1734

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla, can be reached on (571)272-1231. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brenda A Lamb
Examiner
Art Unit 1734